

# ipa1

- Gravity **15.9 BLG**
- ABV **6.7 %**
- IBU **96**
- SRM **5.3**
- Style **American IPA**

## Batch size

- Expected quantity of finished beer **21 liter(s)**
- Trub loss **5 %**
- Size with trub loss **22.1 liter(s)**
- Boil time **60 min**
- Evaporation rate **10 %/h**
- Boil size **26.5 liter(s)**

## Mash information

- Mash efficiency **85 %**
- Liquor-to-grist ratio **3 liter(s) / kg**
- Mash size **18 liter(s)**
- Total mash volume **24 liter(s)**

## Steps

- Temp **64 C**, Time **75 min**
- Temp **76 C**, Time **15 min**

## Mash step by step

- Heat up **18 liter(s)** of strike water to **71.3C**
- Add grains
- Keep mash **75 min** at **64C**
- Keep mash **15 min** at **76C**
- Sparge using **14.5 liter(s)** of **76C** water or to achieve **26.5 liter(s)** of wort

## Fermentables

| Type  | Name                | Amount        | Yield | EBC |
|-------|---------------------|---------------|-------|-----|
| Grain | Strzegom Pale Ale   | 5 kg (83.3%)  | 79 %  | 6   |
| Grain | Strzegom Pszeniczny | 0.6 kg (10%)  | 81 %  | 6   |
| Grain | Carahell            | 0.2 kg (3.3%) | 77 %  | 26  |
| Grain | Płatki owsiane      | 0.2 kg (3.3%) | 85 %  | 3   |

## Hops

| Use for   | Name                   | Amount | Time     | Alpha acid |
|-----------|------------------------|--------|----------|------------|
| Boil      | Columbus/Tomahawk/Zeus | 50 g   | 60 min   | 15.5 %     |
| Boil      | Columbus/Tomahawk/Zeus | 35 g   | 15 min   | 15.5 %     |
| Whirlpool | Simcoe                 | 50 g   | 15 min   | 13.2 %     |
| Whirlpool | Centennial             | 50 g   | 15 min   | 10.5 %     |
| Whirlpool | Simcoe 70st            | 50 g   | 30 min   | 13.2 %     |
| Whirlpool | Amarillo 70st          | 50 g   | 30 min   | 9.5 %      |
| Dry Hop   | Centennial             | 50 g   | 5 day(s) | 10.5 %     |
| Dry Hop   | Amarillo               | 50 g   | 5 day(s) | 9.5 %      |

## Yeasts

| Name | Type | Form | Amount | Laboratory |
|------|------|------|--------|------------|
|------|------|------|--------|------------|

|              |     |     |        |           |
|--------------|-----|-----|--------|-----------|
| Safale US-05 | Ale | Dry | 11.5 g | Fermentis |
|--------------|-----|-----|--------|-----------|